MINICOM
advanced systems

Smart 216 / 232 IP - Quick Start Guide

1. Introduction

To take advantage of the full range of features, we recommend you read the softcopy User Guide after performing the Quick Start procedure. It's in PDF format on the supplied CD or on our website www.minicom.com in the Support section.

All references throughout this guide to the Smart 216 IP refer equally to the Smart 232 IP. The two units are functionally the same. The Smart 216 IP has 16 Server ports and the Smart 232 IP has 32 Server ports.

The Smart 216 IP extends your KVM (keyboard, video, and mouse) from any computer or server over TCP/IP via LAN, WAN or Internet connection. Now 2 remote users can control, monitor and manage up to 16 remote (PS/2, USB) servers simultaneously from wherever they are, inside or outside the organization. Simultaneously 1 local user can also access the servers. Simultaneously 2 more remote users can operate serial devices such as routers or managed network switches. Alternatively, 1 more user can use a PDU.

2. Key features

BIOS level control to any server's brand and model, regardless of the server condition and network connectivity, covering the entire spectrum of crash scenarios.

Compatible with all major operating systems.

Web-based control - Browser control of a Target server, from any location via secured standard IP connection.

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7. The Smart 216 IP unit

Figure 1 illustrates the front panel of the Smart 216 IP.

Figure 1 Smart 216 IP front panel

7.1 LED and button table

LED	Function
Power	Power Indicator
Link	Unit is connected to the network
Remote 1 & 2	Illuminates when a remote session is active

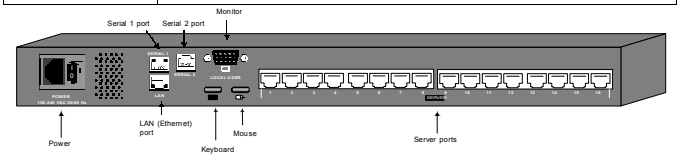

Figure 2 Smart 216 rear panel

7.2 Connector table

Connector	Function
Console KVM	Connect a keyboard, video and mouse to operate the Smart 216 IP locally
Serial 1	Connect any Serial device. Note! Minicom's Serial Remote Power Switch must be connected to Serial 1
Serial 2	Connect any Serial device.
LAN	Connect to 10/100 Mbit Ethernet. Green LED illuminates when unit is connected to a 100 Mbit/sec network. Yellow Led illuminates when unit is connected to a 10 Mbit/sec network.
Server ports	Connect to servers via ROCs

8. Pre-installation guidelines

- Place cables away from fluorescent lights, air conditioners, and machines that are likely to generate electrical noise
- Place the Smart 216 IP on a flat, clean and dry surface
- The Smart 216 IP is not intended for connection to exposed outdoor lines

Security - Supports the highest security standards for encryption (256 bit SSL and HTTPS) and authentication for remote user and advanced OSD management with multi-layer security for local user.

Centralized Management - Can be controlled by the Minicom's Centralized Management systems – AccessIT and KVM.net II.

Seamless power control – with Minicom's Serial Remote Power Switch.

3. System components

The system consists of:

- 1 Smart 216 IP (p/n 1SU70036) or 1 Smart 232 IP (p/n 1SU70037)
- Rack mounting set (p/n 5AC20247)
- ROCS - PS/2, USB

4. Compatibility

The Smart 216 IP is compatible with:

- PS/2 and USB computers/servers
- VGA, SVGA, or XGA monitors
- Windows, Linux, UNIX and other major operating systems

5. Terminology

Below are some terms and their meanings used in this guide.

Term	Meaning
Target server	The computers/servers that are accessed remotely via the Smart 216 IP.
Client computer	The PC running a remote Smart 216 IP session
Remote session	The process of remotely accessing and controlling Target servers connected to Smart 216 IP from a user workstation

6. Client computer operating system

Windows 2000 or higher, with Firefox 3 or Internet Explorer 6.0 or later version. Linux with Firefox 3.

- Ensure that the maximum distance between each computer and the Smart 216 IP, does not exceed 30m/100ft for ROCs.

9. Connecting the system

Figure 3 illustrates the Smart 216 IP system overview.

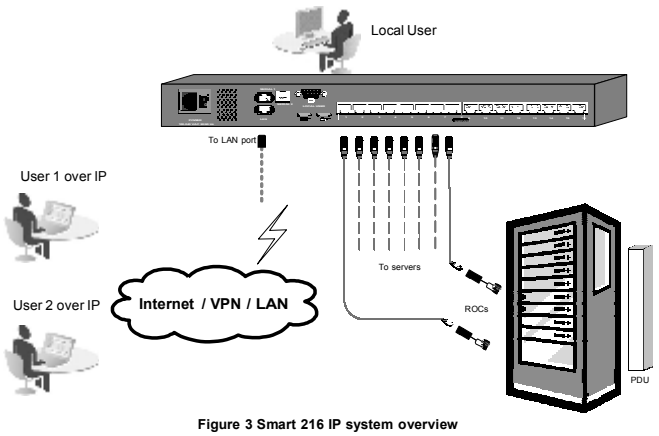

Figure 3 Smart 216 IP system overview

9.1 The ROCs

Each computer/server is directly connected to the Smart 216 IP via the appropriate ROC using CAT5 cable in a star configuration. No external power is needed at the remote ROCs. The ROCs draw their power from the computer's keyboard port (ROC PS/2) or from the USB port (ROC USB). The figures below illustrate the ROC PS/2 and ROC USB.

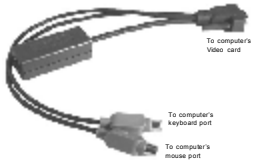

Figure 4 ROC PS/2

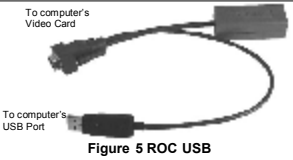

Figure 5 ROC USB

9.1.1 Connecting a ROC PS/2

You can connect the ROC PS/2 to a powered on computer, but it must be in the following order:

1. Connect the Mouse connector to the computer's Mouse port.
2. Connect the Keyboard connector to the computer's Keyboard port.
3. Connect the Screen connector to the computer's Video port.

Failure to connect in the above order while the server is running, may lead to the mouse malfunctioning until the server is rebooted.

9.1.2 Connecting a ROC USB

The ROC USB supports Windows 98 SE and later, MAC, SUN and SGI, and all modern Linux distributions.

To connect the ROC USB:

1. Connect the Screen connector to the computer's Video port.
2. Connect the USB connector to the computer's USB port.

9.2 Connecting to the network

Connect the network cable to the LAN port of the Smart 216 IP. This must be done before powering on the Smart 216 IP.

9.3 Connecting the CAT5 cables

1. Connect one connector to the ROCs RJ45 port.
2. Connect the other connector to one of the Smart 216 IP's Computer ports.
3. Follow the above 2 steps for each computer.

9.4 Connecting a KVM console

To operate the system locally, connect a KVM console to the Smart 216 / 232 IP:

1. Connect the monitor's connector to the Smart 216 / 232 IP's Monitor port.
2. Connect the keyboard's USB connector to the Smart 216 / 232 IP's USB Keyboard port.
3. Connect the mouse's USB connector to the Smart 216 / 232 IP's USB Mouse port.

9.5 Connecting the power supply

1. Using the Power cord provided, connect the Smart 216 IP to a socket outlet with grounding connection. Only use the power cord supplied with the unit.
2. Switch on the Smart 216 IP.

10. Setting the IP address

By default, Smart 216 IP boots with an automatically assigned IP address from a DHCP (Dynamic Host Configuration Protocol) server on the network. The DHCP server provides a valid IP address, gateway address and subnet mask.

You can identify the IP address from the OSD at the local position. Also where there is no DHCP server, set the IP address locally via the OSD as follows:

1. From the local keyboard, press **Shift** twice. The OSD Main window appears. See Figure 6.

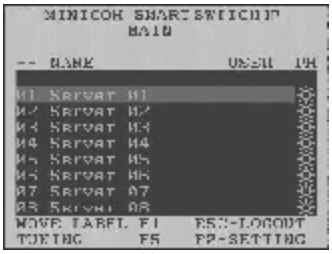

Figure 6 OSD Main window

2. Press **F2**. The Settings window appears see Figure 7.

Figure 7 Settings window

In the Settings window navigate downwards using the Tab key. At the bottom of the window, press tab to go to the top of the window. Change settings by typing in the selected area or by pressing the spacebar – whichever is relevant.

11. The OSD

You operate the Smart 216 / 232 IP system locally via the OSD.

To display the OSD:

1. From the local keyboard, press the left Shift key twice. The OSD Main window appears. See Figure 8. Lines with the sun icons in the PM column show switched on active computers/servers. A switched off computer has no sun icon. When a server is busy the entire line appears in red characters.

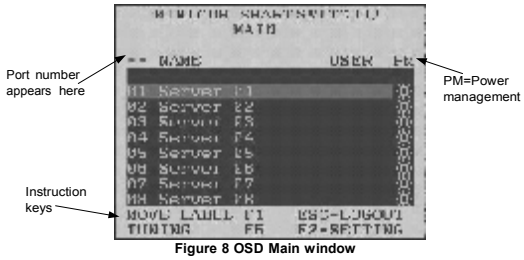

Figure 8 OSD Main window

11.1 Navigating the OSD Main window

To navigate up and down use the Up and Down arrow keys.

To exit the OSD press **Esc**.

11.2 Selecting a computer

To select a computer:

1. Navigate to the desired computer line.

   Or, type the two-digit port number of the desired computer.

2. Press **Enter**. The selected computer is accessed. A Confirmation label appears showing which computer is accessed.

12. Logging into the web interface

To complete the initial setup via the Java configuration interface:

1. Open your web browser (Internet Explorer version 7.0 or higher).
2. Type the Smart 216 / 232 IP system IP address – http or https://*IP address*/ - and press **Enter**. The login page appears.
3. Type the default Administrator user name **- admin -** and password **- access -** (both lower case).
4. Press **Enter**. The web interface opens at the Targets page. See Figure 9.

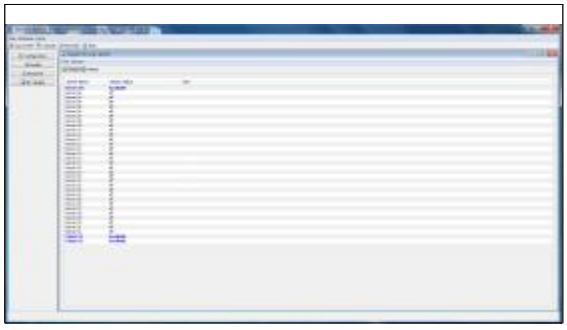

Figure 9 Targets page

5. To connect to a Target, click the desired Target in the Server Name Column.

For the rest of the configuration and operating instructions please see the softcopy User Guide on the supplied CD or on our website

http://www.minicom.com/supportuserguides.htm